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SUPERSEDING
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FILING CABINET, LEGAL AND LETTER SIZE, UNINSULATED, SECURITY

The General Services Administration has authorized the use of this federal specification by all federal agencies.

1 SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers uninsulated filing cabinets which are designed to meet the filing and storage criteria for classified National Security Information set forth in Executive Order 13526, governing the classification, declassification, downgrading and safeguarding of national security information. The cabinets provide protection against unauthorized entry for the periods of time specified in 1.2.1.

1.1.1 Limited use. Cabinets tested and qualified under this specification are to be sold only to the Federal Government, Government contractors specifically authorized to purchase these containers or other organizations specifically authorized or required by the Government to use the containers.

1.2 Classification.

1.2.1 Classes and sizes. The filing cabinets shall be of the following classes and sizes, as specified (see 6.2).

Class 5 - Resistant to 20 man-hours surreptitious entry, 30 man-minutes covert entry and 10 man-minutes forced entry.

Size I - 2-drawer, legal size
Size II - 4-drawer, letter size
Size III - 4-drawer, legal size
Size IV - 1-drawer, special size (see 6.1)
Size V - 5-drawer, legal size
Size VI - 5-drawer, letter size
Size X - 2-drawer, letter size

Class 5-W - Resistant to 10 man-minutes forced entry.

Class 5–W requirements are for weapons containers. These containers are not intended to store classified materials.

Size I - 2-drawer, legal size
Size III - 4-drawer, legal size
Size V - 5-drawer, legal size

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration, Federal Acquisition Service, Integrated Workplace Acquisition Center, Engineering Division (3QSAB), Washington, DC 20406.

Class 6 - Resistant to 20 man-hours surreptitious entry, 30 man-minutes covert entry. No forced entry requirements.

Size I - 2-drawer, legal size
Size II - 4-drawer, letter size
Size III - 4-drawer, legal size
Size IV - 5-drawer, letter size
Size V - 5-drawer, legal size
Size VI - 2-drawer, special size (see 6.1)
Size VII - 1-drawer, special size (see 6.1)
Size VIII - 1-drawer, special size for field use
Size X - 2-drawer, letter size

Class 6-S - Resistant to 20 man-hours surreptitious entry, 30 man-minutes covert entry. No forced entry requirements.

Class 6-S requirements are for uninsulated filing cabinets which are specifically designed for installation and use aboard DoD ships to protect classified information. These shipboard (S) cabinets provide an integral method of mounting that will not compromise the security integrity of the cabinet or its operation and will meet shipboard operational requirements. This is accomplished by incorporating an integral pedestal.

Size I - 2-drawer, legal size
Size II - 4-drawer, letter size
Size III - 4-drawer, legal size
Size IV - 5-drawer, letter size
Size V - 5-drawer, legal size
Size X - 2-drawer, letter size

1.2.2 Designs. When specified (see 6.2), cabinets shall be of the following designs.

DL - Dual lock. Two separate combination locks (see 3.3.1.1 and Figure I).

DM - Dual multiple lock. Independently controlled locking drawers with each drawer having one or two separate combination locks and a separate locking mechanism, as specified (see 3.3.1.1 and Figure II).

ML - Multiple lock. Independently controlled locking drawers with each drawer having its own individual combination lock and locking mechanism (see 3.3.1.1 and Figure III).

1.2.3 Styles. The cabinets shall be of the style specified (see 6.2).

K - Key changeable combination lock.
H - Hand changeable combination lock.

2. APPLICABLE DOCUMENTS

2.1 Government publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issue in effect on the date of invitation for bids or request for proposal, shall apply.

Federal Specifications:

QQ-C-320 - Chromium Plating (Electrodeposited)
QQ-P-416 - Plating, Cadmium (Electrodeposited)
TT-C-490 - Chemical Conversion Coatings and Pretreatments for Ferrous Surfaces (Base for Organic Coatings)
PPP-B-601 - Boxes, Wood, Cleated Plywood
PPP-B-621 - Boxes, Wood, Nailed and Lock Corner
FF-L-2937 - Combination Lock, Mechanical
FF-L-2740 – Locks, Combination

Federal Standards:

FED-STD-123 - Marking for Domestic Shipment (Civilian Agencies)
FED-STD-595 - Colors
FED-STD-809 – Neutralization and Repair of GSA Approved Containers and Vault Doors

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this Specification and other Federal Specifications are available from: General Services Administration, Federal Supply Service, Specifications Section (3FP-E), Suite 8100, 470 East L'Enfant Plaza, SW, Washington, DC 20407, Tel - (202)619-8925.)

Military Specifications:

MIL-L-10547 - Liners, Case and Sheet Overwrap, Water-Vaporproof or Waterproof, Flexible

MIL-S-901 (NAVY) – Shock Test High Impact Shipboard Machinery, Equipment, and Systems, Requirements For

Military Standards:

MIL-STD-129 - Marking for Shipment and Storage

MIL-STD-167-1A – Mechanical Vibrations of Shipboard Equipment

(Copies of Military Specifications and Standards are available from: DODSSP - Customer Service, Standardization Document Order Desk, 700 Robbins Avenue, Bldg. 4D, Philadelphia, PA 19111-5094, Tel (215)697-2179)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on the date of invitation for bids or request for proposal, shall apply.

American Society for Quality (ASQ):

ASQ Z1.4 - Sampling Procedures and Tables for Inspection by Attributes

(Private sector and civil agencies may purchase copies of this voluntary standard from the American Society for Quality, P. O. Box 3005, Milwaukee, WI 53201-3005.)

American Society for Testing and Materials (ASTM):

B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel

(Application for copies should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959)

National Motor Freight Traffic Association, Inc., Agent:

National Motor Freight Classification

(Application for copies should be addressed to the American Trucking Association, Inc., Traffic Department, 1616 P Street, NW, Washington, DC 20036.)

Uniform Classification Committee, Agent:

Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

3 REQUIREMENTS

3.1 Qualification. The security filing cabinets furnished under this specification shall be products which have been tested and have passed the qualification tests and inspections specified in section 4, and have been listed on or approved for listing on the applicable qualified products list (QPL). No changes may be made in the design or construction of listed products without written approval from the activity responsible for the qualification.

3.1.1 Qualification suspension.

3.1.1.1 Development of entry techniques. The cabinets qualified under this specification will be continually tested by the Government during the term of qualification to determine whether the entry protection afforded by the cabinets should or can be improved. If, at any time, entry techniques are developed within the framework of the specification which affect a cabinet's security integrity, it shall be removed from the QPL.

3.1.1.2 Change in specification requirements. This specification will be reviewed by the Government to determine whether specification requirements should or can be changed to improve product quality. If, at any time, requirements are changed, and such changes affect the qualification status of a qualified cabinet, it shall be removed from the QPL and the manufacturer will be required to modify the product to the extent necessary to comply with specification changes and have the product re-qualified.

3.2 Material. Materials used in the cabinet's construction shall be as specified herein. Materials not specified shall be of good commercial quality, suitable in all respects for the purpose intended. Materials used in the cabinet shall be of the type, thickness and strength to meet all applicable

requirements of this specification. Materials shall be free from rust, scale, pits, buckles and other imperfections which might adversely affect the appearance or the serviceability of the finished product.

3.2.1 Face hardware. The face hardware, excluding combination locks and the carrying handles and lock dial protector on Size VIII cabinets, shall be satin finished anodized aluminum or stainless steel, or satin finished chromium on steel or on diecast zinc, brass or bronze. The exposed surfaces of all hardware used on a single unit shall be finished to match each other within the limits of the base material and protective coating used. The exposed surfaces of all face hardware shall be free of sharp edges, burrs, pits, nicks or scratches that penetrate the protective plating or anodizing.

3.2.2 Finishing Materials.

3.2.2.1 Enamel and lacquer. The final coat for the cabinet shall be powder coat, epoxy, acrylic, lacquer or urethane. The color shall be as specified in 3.2.3.

3.2.2.2 Chromium plating. Chromium plating shall be in accordance with class I, type II of QQ-C-320.

3.2.2.3 Cadmium plating. Cadmium plating shall be in accordance with class I of QQ-P-416.

3.2.2.4 Zinc coating. Zinc coating shall be in accordance with ASTM B633, Type I, with a thickness coating classification of Fe/Zn 8.

3.2.3 Color of finish. The color of finish shall be as specified (see 6.2) from the following colors as provided by FED-STD-595.

Gray - Color No. 26134
Black - Color No. 27040
Parchment - Color No. 27769

(Sample panels of the standard colors are obtainable, without charge, from the Business Service Center, Federal Supply Service, General Services Administration, Washington, DC 20407, or from the Business Service Center of the nearest Regional Office.)

3.3 Construction and design.

TABLE I. Dimensions and weights.

Maximum outside - overall All dimension in inches. (excluding face hardware)				Maximum weight, pounds (with drawers)
Class/Size	Height	Width	Depth	
5 I	30-5/8	20-7/8	33-1/2	850
5 II	58-1/2	17-5/8	33-1/2	1025
5 III	58-1/2	20-7/8	33-1/2	1214
5 IV	20	20-7/8	21	244
5 V	58-1/2	20-7/8	33-1/2	1214
5 VI	58-1/2	17-5/8	33-1/2	1025
5 X	30-5/8	17-5/8	33-1/2	850
5-W I	30-5/8	20-7/8	33-1/2	850
5-W III	58-1/2	20-7/8	33-1/2	1214
5-W V	58-1/2	20-7/8	33-1/2	1214
6 I	30-5/8	20-7/8	28	365
6 II	58-1/2	17-5/8	28	514
6 III	58-1/2	20-7/8	28	609
6 IV	58-1/2	17-5/8	28	600
6 V	58-1/2	20-7/8	28	710
6 VI	27	20-7/8	20	261
6 VII	12-3/8	15-1/2	17-1/8	129
6 VIII	12-3/8	15-1/2	17-1/8	138
6 X	30-5/8	17-5/8	28	365
6-S I	34-5/8	20-7/8	28	415
6-S II	62-1/2	17-5/8	28	564
6-S III	62-1/2	20-7/8	28	659
6-S IV	62-1/2	17-5/8	28	650
6-S V	62-1/2	20-7/8	28	760
6-S X	34-5/8	17-5/8	28	415

3.3.1 Design. Filing cabinets shall be 1 drawer wide and shall have the same general appearance as standard, vertical filing cabinets, with the number of drawers specified in 1.2.1.

3.3.1.1 Design DL, DM and ML. The general exterior appearance of the DL, DM and ML cabinets shall be as shown in Figures I, II and III, respectively. The illustrations identify the basic styling required. They do not represent specific location or design of face hardware (locks, drawer handles and label holders) on drawer fronts, unless otherwise specified herein. Design ML and DM cabinets shall have interior, drawer compartment partitions installed between each drawer to provide security to the individual drawer user. The partitions shall be welded in position and shall completely isolate each drawer from any other drawer.

3.3.2 Dimensions and weights. The cabinets, exclusive of face hardware and caster base platform, shall be of the maximum dimensions and weights specified in Table I. The weight shall be permanently marked on the cabinet base or on the left or right front upright near the cabinet base. The characters shall be not less than 1/2 inch in height and shall be visible from the front of the cabinet.

3.3.3 Assembly. The cabinet top, bottom, sides, back and case frame members shall be assembled into a rigid unit. Mechanical attachments shall be secured by methods to withstand loosening during the service life of the cabinet. All welding and brazing shall be sound without porosity and shall accomplish secure connections and joints in proper alignment. The greatest depth permitted on depressed spot welds on exterior surfaces shall be not more than 1/64 (0.0156) inch. All excessively depressed spot welds and all cratered spot welds shall be filled, ground smooth and finished so as to blend with the cabinet finish. Interior welds shall be finished to eliminate sharp edges and rough surfaces which might cause personal injury. The cabinet shall withstand the rack test in 4.6.3 without sagging or binding of parts or other damage to cause interference with the smooth, easy operation of drawers, suspensions, followers, lock mechanism and other movable parts.

3.3.3.1 Pedestal construction (S cabinets only). The pedestal shall be assembled and attached to the cabinet in accordance with paragraph 3.3.3. The pedestal shall not exceed the width or depth of the cabinet nor be less than 1/2 inch smaller than these dimensions. The height of the pedestal shall be 4 inches and it shall have a mounting flange contacting the deck or floor of the vessel at least 1-1/2 inches wide on its entire perimeter. In order to facilitate lifting, mounting, and inspection after installation, the pedestal shall have 6 openings formed into it. These openings shall be 6-1/2 inches wide and 2-1/2 inches high. There shall be two openings on each side located equidistant from the center line and not less than 10 inches apart. There shall be one opening on the front and back of the pedestal located on the center line.

3.3.4 Drawers.

3.3.4.1 Components. Each cabinet drawer shall have drawer stops specified in 3.3.4.4, a drawer pull or handle specified in 3.3.4.5, drawer latch with release mechanism specified in 3.3.4.6, a label holder specified in 3.3.4.7 and a follower block specified in 3.3.5. Drawer guide rods are not permitted.

3.3.4.2 Drawer design. The drawer design shall be such that when the drawer is pulled open, the file material stored therein shall be directly accessible to the user without requiring further movement or operation of any cabinet part or component. The drawer shall allow hanging folders. The drawer shall be aligned in the drawer opening and shall fit squarely, equidistant on all four sides. The drawer, when loaded with typical filing material, shall

travel easily, quietly and smoothly on its suspension, and at no point in the open position shall there be contact between the drawer's top or bottom surfaces and the top or bottom surfaces of any other open drawer. The drawer shall be removable from the cabinet for service purposes.

3.3.4.3 Construction. The drawer body shall be formed of a material as specified in 3.2. The drawer back shall be attached to the drawer body by suitable and effective methods. The control drawer head shall be removable from the drawer body for service purposes. Drawer heads shall be interchangeable, without modification and with a minimum of alignment effort, between cabinets of the same brand, class and width (legal or letter). The height of the drawer back shall be not less than the height of the drawer sides. The upper edge of the drawer shall be formed in a flat fold, side bead or finished in a manner to eliminate burrs and rough edges. The inside corners of the drawer front shall be neatly closed and formed in such a manner as to present no external sharp corners or rough edges.

3.3.4.4 Stops. The drawer stops shall be a heavy duty type which shall prevent the drawer from hitting the back of the cabinet on the inward movement and shall prevent the drawer from falling out of the cabinet when pulled to the fully opened position. Stops shall be tested in accordance with paragraph 4.6.2.

3.3.4.5 Drawer pull or handle. The drawer pull or drawer handle shall be constructed of one of the materials in 3.2.1 and shall be of sufficient thickness and strength to withstand hard daily usage. Stamped drawer pulls are not permitted. The pull shall be securely and firmly staked to the drawer head by a method to prevent its accidental loosening during the service life of the cabinet. The drawer latch release mechanism in 3.3.4.6 may be integral with the drawer pull or handle. The drawer pull handhold and the handhold for the drawer handle shall be not less than 1 inch by 3-1/2 inches. The pull or handle shall be finished to eliminate roughness and sharp edges.

3.3.4.6 Drawer latch and latch release control. Each drawer, including the lock drawer shall have an automatic latch which shall be activated when the drawer is moved to the closed position. The latch for the lock drawer may be integral with the locking bolt mechanism. The latch shall hold the unlocked drawer(s) in the closed position; and unless the latch release control is operated, it shall not be possible to open the drawer(s) by shaking, jerking or moving the closed drawer up and down, back and forth or side to side. The latch mechanism design and materials used in its construction shall be of sufficient strength to withstand hard usage. The latch release may be integral with the drawer handle or it may be a finger controlled button or lever located on the drawer front adjacent to the drawer handle or pull, so that easy one-hand operation is possible to simultaneously release the latch and pull the drawer open. The latch and latch release shall operate easily and smoothly.

3.3.4.7 Label holder. The label holder shall readily accommodate and retain without binding label cards not less than 2-3/4 by 1-3/4 inches. The label holder shall be securely attached, without movement, to the drawer front and any required mounting slots in the drawer front shall not be visible after the label holder is installed.

3.3.4.8 Lock box. The lock box shall protect the lock from attack. The lock box shall be six sided. The lock box shall be permanently attached to the drawer head. The lock box shall have drill resistant material on the front and sides of the box. The back cover plate shall be made of a material that protects the lock from attack from the back of the container. The back cover plate shall be attached such that it keeps the back of the lock from being driven off the lock using the spindle hole. The rear cover plate of the

lock box shall be removable for inspection and combination changing purposes.

3.3.5 Movable follower block. The follower block shall be as specified in 3.3.5.1 or 3.3.5.2. Its upper edge shall have a completely closed formation and all exposed surfaces shall be finished in a manner which completely eliminates roughness. The follower block shall be easy to adjust and removable. The follower block control shall be easily accessible when placed in the farthest back position.

3.3.5.1 Friction locking type. The friction locking type follower block shall be held in place by means of pressure exerted against the drawer sides and shall be held securely in a right angle position to the drawer sides at any point along the drawer depth, except for a maximum of 5 inches at the front of the drawer. The follower block shall be spring controlled and activated at one point near the upper edge of the follower by a device designed for this purpose. The follower block shall withstand the test specified in 4.6.5 without damage or creeping in excess of 1/2 inch.

3.3.5.2 Positive locking type. The positive locking type follower block shall be held in place by engaging slots along the drawer sides or bottom and

shall be held securely in a right angle position to the drawer sides at no greater than 1 inch increments, except for a maximum of 5 inches at the front of the drawer. The locking method shall be such as to prevent disengaging by pressure of filing material in the drawer. When the locking method does not incorporate spring action, the locking shall be accomplished solely by the weight of the follower block. Positive locking followers shall withstand the test in 4.6.5 without damage or disengagement from the secure right angle position to the drawer sides.

3.3.5.3 Follower block support. The follower block support shall be constructed of corrosion resistant material or shall be made corrosion resistant by plating as specified in 3.2.2.3 and 3.2.2.4 or may have an oxide coating with the entire member then coated with an organic finish which dries to a hard film. The support shall be held securely and shall move freely within the formation provided in the drawer side. The support arm extending along the drawer side shall be not more than 5 inches or less than 4-1/2 inches in length.

3.3.6 Drawer suspensions. Drawer suspensions shall be either a side arm type or a cradle type. All welds necessary in the assembly of the suspensions shall provide strong, secure joints and connections. Except for areas burned during welding processes, all surfaces of suspension members shall be cadmium or zinc plated as specified in 3.2.2.3 and 3.2.2.4. A supplementary coating shall be used to cover weld burned areas. Alternatively, an oxide coating may be used with the entire member then coated with an organic finish which dries to a hard film. Suspensions shall be equipped with bumpers of a shock absorbing material and located so as to prevent metal-to-metal contact between the rear of the suspension and drawer track and the back of the cabinet case. Suspension slides shall travel easily, quietly and smoothly with the drawer. Suspensions shall meet the test requirements in 4.6.1 and 4.6.3.

3.3.6.1 Drawer and case tracks. Case tracks shall be secured to at least the front and rear interior reinforcing members by interlocking of lugs on the case track into appropriate openings in the reinforcing members. The interlocking shall provide secure connections without vertical or horizontal movement. Alternatively, the case track may be attached to the front and rear interior reinforcing members by interlocking lugs, bolts or welding, or any combination thereof, to provide a comparable connection. The drawer track mounting shall be attached to the drawer sides by spot welds. The drawer and case tracks shall be so located as to be level and in proper relation to one

another and must hold the drawer squarely in the drawer opening. All outer surfaces of the drawer and case tracks shall be finished in accordance with 3.2.2 and 3.5.

3.3.7 Drawer dimensions. The minimum drawer dimensions shall be as shown in Table II. Inside drawer dimensions are exclusive of the hanging folder support.

TABLE II. Drawer dimension. (All dimensions are in inches.) Minimum, inside drawer, clear (excluding follower block)

Cabinet Size	Height	Width	Depth
All legal size	10-1/4	15-1/4	24
All letter size	10-1/4	12-1/4	24
Class 5 Size IV	10-1/4	15-1/4	14-1/2
Class 6 Size VI	10-1/4	12-1/4	16-1/2
Class 6 Size VII & VIII	10-1/8	12-1/4	13

3.3.8 Class 6, Size VIII carrying handles. The cabinet shall be provided with 2 lift type carrying handles. The handles shall be of a hinged down design and shall be attached in such a manner and position to provide balance and facilitate the movement of the cabinet. The handles are not intended to provide security against unauthorized removal of the cabinet but are furnished to assist in the authorized movement of the cabinet from one location to another. The handles shall have all surfaces ground smooth to eliminate roughness and sharp edges. The assembly shall be provided with stops to prevent the handles from being raised beyond the 90 degrees from the hinged down position. The handles and their attachment shall be capable of withstanding the test specified in 4.6.9.

3.3.8.1 Class 6, Size VIII carrying handle assembly dimensions. The carrying handles shall be of not less than 1/2 inch diameter steel. The handle handhold shall be not less than 3-1/2 by 1-1/4 inches and shall be designed to easily accommodate the user's hand. The handles shall be securely attached to a metal plate support surface of not less than 1/4 inch thickness. The support surface shall be attached to the cabinet case by a continuous arc welding process so as to withstand rough handling. The handle assembly, when in the lift position, shall provide a clearance of not less than 2 inches from all projections on the cabinet.

3.3.8.2 Class 6, Size VIII dial knob protector. The dial of the cabinet shall be protected by a shield of not less than 16 gage (0.0598 inch) steel. The shield shall project beyond the outmost surface of the dial assembly and shall be securely welded to the cabinet to withstand heavy abuse. The attachment of the shield shall not interfere with the ease of dialing the lock combination, nor shall its attachment weaken the tamper resistance qualities of the cabinet.

3.3.9 Caster base platform. When specified (see 6.2), a caster base shall be furnished. The casters shall be attached to the four corners of a dolly platform without mechanical attachment to the cabinet. The dolly platform shall be of the same dimension as the cabinet base. Caster and dolly shall be manufactured of malleable steel and shall have sufficient strength to transport safely, loads equal to 2-1/2 times the weight of the cabinet. Minimum width of casters for each of the four corners of the dolly shall be 1-1/2 inches. If dual casters are used, each caster wheel shall be a minimum of 3/4 inch wide.

3.4 Locking mechanism and lock.

3.4.1 Lock mechanism. All drawers of the cabinet shall be locked with a

dead bolt locking mechanism which is controlled by a changeable, combination lock specified in 3.4.2. Under the conditions specified in 4.6.7, it shall not be possible to secure the control (lock) drawer when any other drawer is open beyond the point of engagement of the locking mechanism. The requirements of paragraphs 3.4.1 and 4.6.7 do not apply to Design ML or DM cabinets.

3.4.1.1 Locking mechanism for Design DL cabinets. The Design DL cabinets shall be equipped with two separate built-in, changeable, combination locks. Both locks shall be mounted in the same drawer of the cabinet. Together, the two locks shall control the locking of the entire container. It shall not be possible to unlock the drawers without dialing the correct combination settings of both locks. The locks shall meet the requirements of 3.4.2.

3.4.1.2 Locking mechanism for Design ML cabinets. Each drawer in the ML cabinet shall have its own positive, dead bolt locking mechanism and changeable combination lock to provide the required security for the individual drawer. The proper opening and closing of individual drawers shall be accomplished regardless of the locked or unlocked condition of any other drawer or drawers in the cabinet. The combination locks shall be as specified in 3.4.2.

3.4.1.3 Locking mechanism for Design DM cabinets. Each drawer in the DM cabinet shall have its own positive, dead bolt locking mechanism and one or two separate built-in, changeable, combination locks to provide the required security for the individual drawer. It shall not be possible to unlock the drawer without dialing the correct combination settings of both locks if it has two, or of its lock, if it has one. The proper opening and closing of individual drawers shall be accomplished regardless of the locked or unlocked condition of any other drawer or drawers in the cabinet. The combination locks shall be as specified in 3.4.2.

3.4.2 Changeable combination lock. A changeable combination lock of the type specified herein shall be installed in the lock box (3.3.4.8) as an integral part of the cabinet. The lock dial and ring shall be of top reading, spy resistant design. Locks with graduated dials shall have the dial and ring protected by a removable dust cover. Locks used on all Classes and Sizes shall meet the requirements of Federal Specification FF-L-2740, except as noted in paragraph 3.4.2.1, 3.4.2.2, and 3.4.2.3. The cabinet's design shall incorporate a method of inspecting and servicing the lock and the cabinet's bolt and cam without completely removing the drawer head. The method used may be an inspection plate in the drawer head installed in a manner as not to affect the integrity of the container.

3.4.2.1 Class 6, Size VIII cabinets shall be furnished with locks that meet the requirements of Federal Specification FF-L-2937.

3.4.2.2 Class 6, Size VI and Class 6, Size VII cabinets may have locks that meet requirements of Federal Specification FF-L-2937 if the container is going to be used in a tactical vehicle only. For all other applications, the Class 6, Size VI and Class 6, Size VII containers shall have locks that meet the requirements of Federal Specification FF-L-2740.

3.4.2.3 Class 5-W weapons containers shall be furnished with locks that meet the requirements of Federal Specification FF-L-2937.

3.4.2.4 Combination lock installation. The lock's dial ring shall be mounted so as to be flush against the front surface of the drawer front, and its attachment to the drawer front shall be firm and secure without movement or side play. The lock case shall be securely attached to the lock drawer head with screws. Screws shall be retained by lock washers or other suitable and effective means so that there is no movement or side play to the lock case. The lock’s spline key shall not be defaced in any manner and shall be inserted

to within 1/32 inch of the top of the cam. The lock's outer spindle shall be threaded to not more than 4 threads from the top of the lock drive cam. The lock shall not be changed or altered in any manner from the formation supplied by the lock manufacturer. Metal plates, housing or other barriers used around the lock case shall be installed in a manner so as not to abrade or otherwise damage the lock spindle. No lubricant other than that recommended by the lock manufacturer shall be used within the lock case.

3.4.3 Locking mechanism and lock mounting drawings. Complete, readable, exploded view drawings of the locking mechanism and the lock mounting, with individual parts identified, shall be attached to the interior of the control drawer cover plate.

3.4.4 Government testing. The Government testing facility for the General Services Administration reserves the right of testing the combination lock in accordance with standards that are privileged to the Government.

3.5 Pretreatment and finish.

3.5.1 Pretreatment. All exterior and interior ferrous metal surfaces shall be treated for painting in accordance with any of the types in Federal specification TT-C-490.

3.5.2 Finish. The finish coating specified in 3.2 shall be applied to all exterior and interior metal surfaces except plated metal. The exterior coating shall be textured. The texture shall be designed to make it difficult to disguise covert entry attempts. The minimum total finished film thickness of the final coat shall be not less than 1.0 mil. The finish shall level out to produce uniform exposed surfaces without runs, wrinkles, grit, areas of thin or no film or separation of color. Special attention shall be given to the base and interior to ensure that all surfaces are adequately protected against rust. The final finish shall withstand the test in 4.6.13 without evidence of cracking, flaking or loss of adhesion of the finish. Two test panels of 20 gage (0.0359 inch) steel shall be furnished with the cabinet for the purpose of the test in 4.6.13. One panel shall be prepared to reflect the inner coating and one to reflect the outer coating used.

3.5.3 Plating. Bolts, screws, nuts and similar accessories shall be made to resist rust by electro galvanizing, or by zinc, cadmium or chromium plating. Plating shall be in accordance with 3.2.2.

3.6 Lubrication. The cabinet's moving parts requiring lubrication shall have a permanent type lubricant applied which is suitable to the varied climatic conditions likely to be encountered during the service of the product.

3.7 Resistance to entry techniques.

3.7.1 Surreptitious, covert and forced entry. The cabinet shall withstand the tests in 4.6.11 for not less than the periods of time specified hereunder.

Class 5 cabinets - 20 man-hours surreptitious entry, 30 man-minutes covert entry and 10 man-minutes forced entry.

Class 5-W cabinets - 10 man-minutes forced entry.

Class 6 cabinets - 20 man-hours surreptitious entry, 30 man- minutes covert entry.

Class 6-S cabinets – 20 man-hours surreptitious entry, 30 man-minutes

covert entry.

3.7.2 <u>Radiological techniques</u>. The cabinet and its locking mechanism shall withstand the test in 4.6.12 for not less than 20 man-hours. This requirement does not apply to weapons containers.

3.8 <u>Identification labels</u>. Each cabinet supplied under a contract or order under this specification shall bear metallic labels showing the information specified hereunder. Labels shall be attached with a durable adhesive sufficient to preclude removing the label without destroying the label. Regardless of the method used, the label attachment shall not degrade the cabinet security.

3.8.1 <u>General Services Administration label</u>. This label shall be affixed to the outside face of the control drawer. The label shall have red lettering not less than 1/8 inch high.

3.8.1.1 – Class 5 and 6 label. The label shall be as follows:

GENERAL SERVICES ADMINISTRATION
APPROVED SECURITY CONTAINER
MANUFACTURER'S NAME

3.8.1.2 – Class 6-S label. The label shall be as follows:

This label shall be affixed to the outside face of the control drawer. The label shall show, in red lettering not less than 1/8 inch high, the following:

GENERAL SERVICES ADMINISTRATION
APPROVED SECURITY CONTAINER
SHIPBOARD
MANUFACTURER’S NAME

3.8.1.3 – Class 5-W label. The label for weapons containers shall be as follows:

GENERAL SERVICES ADMINISTRATION
APPROVED
WEAPONS CONTAINER
(Weapons Storage Only)
MANUFACTURER'S NAME

3.8.2 <u>Cabinet identification and contract number</u>. This label or labels shall be affixed to the external side of the drawer containing the lock. The label shall show, in easily read letters, the manufacturer's name and address, the cabinet's model and serial numbers, date of manufacture, and the Government contract number. On ML and DM cabinets, the label shall be on the top or second drawer.

3.8.3 <u>Certification label</u>. A certification label shall be affixed to the external side of the control drawer containing the lock and shall bear the following certification:

For the Class 5 cabinet -

"This is a U.S. Government Class 5 cabinet which has been approved by GSA under Fed. Spec. AA-F-358J. It affords the following protection:

30 man-minutes against covert entry.
10 man-minutes against forced entry.
20 man-hours against surreptitious entry."

For the Class 6 cabinet-

"This is a U.S. Government Class 6 cabinet which has been approved by GSA under Fed. Spec. AA-F-358J. It affords the following protection:

30 man-minutes against covert entry.
20 man-hours against surreptitious entry.
No forced entry requirement."

For the Class 6-S cabinet-

"This is a U.S. Government Class 6-S cabinet which has been approved by GSA under Fed. Spec. AA-F-358J. It affords the following protection:

Resistance to high impact shipboard shock test (MIL-S-901)
30 man-minutes against covert entry.
20 man-hours against surreptitious entry.
No forced entry requirement."

For the Class 5-W cabinet-

"This is a U.S. Government Class 5-W cabinet which has been approved by GSA under Fed. Spec. AA-F-358J. It affords the following protection:

10 man-minutes against forced entry.
This cabinet is intended for use in storing weapons. This cabinet is not intended for the storage of national security information."

3.8.4 Number label. Security cabinets under this specification shall have a number label securely affixed to the front face of the product. The label shall be mounted on the cabinet frame above or to the left side of the top drawer. The label shall be nominal 0.020 inch thick, satin finished aluminum and shall be 2-1/2 by 11/16 inches. The label numbering system shall be established by the manufacturer to provide non-repetitive numbers. The label characters (numbers or letters) shall be minimum 3/16 inches high and shall be embossed.

3.8.5 Warning label. A warning label shall be affixed to the top inside of the control drawer head. The label shall show, in red lettering not less than 1/8 inch high, the following:

Notice: Any modification of this container not in accordance with FED-STD-809 will invalidate the GSA approval and the GSA approval label shall be removed.

3.9 Workmanship. The workmanship shall be of a quality to produce a serviceable item, able to withstand hard daily usage. The edges of all parts and sheets shall be protected by folding, beading, flanging or grinding to eliminate burrs or sharp edges. The bending of the channels and flanges shall be straight and smooth. Welding and brazing shall be secure. Lock washers, cotter pins, clips, retainers or built-in features shall be used to prevent loosening of screws, bolts and nuts which may cause disengagement of parts. To assure strict compliance with 3.4.2.1, particular attention shall be given to the quality of workmanship and the method used in the installation of the combination lock in the cabinet. Moving parts shall operate smoothly. The security filing cabinet shall be free of any defects or features which may

affect its appearance and its serviceability or which might cause personal injury.

3.10 Assembly drawing and parts list. A parts list of all cabinet parts which may be subject to subsequent replacement because of wear or damage shall be furnished with each cabinet delivered under contract. The parts list shall clearly identify the parts by description, location and part number. When necessary, assembly drawings shall be provided to show the location of the parts. The parts list shall be printed on heavy paper or other suitable material and bonded by glue or adhesive to an inside surface of the cabinet in a location accessible to maintenance personnel.

3.11 Replacement of component parts. Component parts, such as drawers, suspensions, combination locks and external face hardware shall be capable of identical replacement in the field without the use of specialized tools or specially qualified personnel and without weakening the security protection of the cabinet. Spare parts lists for the manufacturer's current production shall be immediately available upon the written request from the user. Manufacturers shall maintain replacement parts for a minimum of five years after any design change.

3.12 Regulatory requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580, as amended, to the maximum extent practicable.

4. QUALITY ASSURANCE PROVISIONS

4.1 Inspection responsibility. Except that testing for qualification shall be performed by an agency designated by the General Services Administration, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own or any other inspection facility or service acceptable to the Government. Inspection records of the examination and tests with itemized results shall be kept complete at the manufacturer's facility, available to the Government throughout the duration of the contract, or a minimum of two years, whichever is longer. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to the prescribed requirements.

4.1.1 Component and material inspection. In accordance with 4.1, the supplier is responsible for insuring that components and materials used are manufactured, tested and inspected in accordance with the requirements of referenced specifications and standards to the extent specified or, if none, in accordance with this specification.

4.2 Qualification testing and inspection. Qualification testing and inspection shall consist of the following tests and inspections. Failure to meet any one of these requirements shall provide reason to consider the product as having failed to meet the requirement for qualification.

(a) Drawer pull test - 4.6.1
(b) Out stop test - 4.6.2
(c) Rack test - 4.6.3
(d) Service test - 4.6.4
(e) Moving test - 4.6.5
(f) Follower block test - 4.6.6
(g) Lock drawer test - 4.6.7
(h) Locking mechanism service test - 4.6.8
(i) Carrying handle test - 4.6.9
(j) Drop test - 4.6.10
(k) Surreptitious, covert and forced entry test - 4.6.11

(l) Radiological test - 4.6.12
(m) Finish Test – 4.6.13
(n) Inspections - 4.7

In addition, Class 6-S containers shall be tested to the following:

(o) 6 inch drop test – 4.6.14
(p) High impact shipboard shock test – 4.6.15
(q) Vibration test – 4.6.16

4.3 Inspection and testing for acceptance. The Government reserves the right to inspect and test each cabinet, including all component parts thereof, delivered for acceptance under this specification after award of contract.

4.3.1 Inspection. Cabinets delivered for acceptance under contract or order shall be inspected as specified in 4.7. Any defect shall provide reason to reject the product. Rejected cabinets may be reworked to correct defects and they may be resubmitted for acceptance. Reworked cabinets shall be so indicated to the Government inspector.

4.3.2 Testing. Periodically, during the term of the contract, the Government inspector, at a time convenient to the Government, will select samples of the manufacturer's regular production and subject them to the tests in 4.6. This acceptance testing shall be performed by a Government agency specifically designated by the General Services Administration. Failure of the cabinet to meet any one or more of these tests shall provide reason to suspend acceptance of the manufacturer's product until the Government is satisfied that all defects have been corrected.

4.4 Inspection of preparation for delivery. An inspection shall be made to determine that packaging, packing and marking comply with those specified in Section 5 of this specification. For examination of interior packaging, the sample unit shall be one shipping container fully prepared for delivery, selected at random just prior to the closing operations. Sampling shall be in accordance with ANSI/ASQ Z1.4. Defects of closure listed shall be examined on shipping containers fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 with an AQL of 4.0 defects per hundred units.

TABLE III. Classification of preparation for delivery defects.

Markings	Omitted; incorrect; illegible; improper size; wrong location or method of application.
Materials	Packaging materials not as specified, missing or damaged or not serviceable.
Workmanship	Straps not properly tensioned. Containers inadequately closed, poor application of internal packing parts, moveable or loose parts not secured properly.

4.5 Testing procedures and tests.

4.5.1 Testing agency. Qualification tests accomplished on products submitted under this specification for approval for inclusion on the applicable Qualified Products List (QPL) and any re-testing that may be required shall be performed by a testing agency specifically designated or approved by the General Services Administration.

4.5.2 Testing costs. All testing costs entailed in determining the qualification of the supplier's product, including costs of re-testing a qualified product if subsequently disqualified under 3.1.1.1 or 3.1.1.2, shall be borne by the supplier. Test costs borne by the supplier shall be payable

as directed by the Integrated Workplace Acquisition Center, Federal Acquisition Service, General Services Administration.

4.5.3 Test procedures. The following procedures shall govern the testing of all products submitted for qualification under this specification.

(a) Samples shall be submitted for qualification only after the supplier has obtained written authorization from the General Services Administration.

(b) A qualification test may be discontinued at the Government's testing facility at any time the product fails to meet any one of the requirements set forth in this specification. The manufacturer may be permitted to make modifications on the sample during the testing phase where such modifications, in the judgement of the General Services Administration and the testing facility, are clearly in the interest of the Government.

(c) In case of failure of the sample, consideration will be given to the request of the manufacturer for submission for retest only after it has been clearly shown that changes have been made in the product which the Government considers sufficient to warrant retest.

(d) The manufacturer or his representative will not be permitted to observe the tests conducted on his product at the testing facility. However, when samples tested fail to comply with the requirements of this specification, the sample may be examined by the manufacturer or his representatives and full details of the failure may be made known to them in a manner which, for reasons of security, will be in the best interest of the Government. Appropriate security clearances may be required prior to release of information.

4.5.4 Test samples. Test samples of the class, size and design specified shall be submitted to a testing facility approved by the General Services Administration. In the event the samples are destroyed or damaged to such an extent during testing that testing cannot be completed, the Government reserves the right to require the manufacturer to furnish additional samples necessary to complete the testing. Samples submitted for testing, shall be provided with an identification tag which references the specification, type, class, size, and design.

4.5.5 Drawings and list of materials. The manufacturer shall furnish five complete sets of construction and assembly drawings and lists of materials with samples submitted for qualification. When the samples are tested and are approved for inclusion on the applicable QPL, three sets of the drawings and lists of materials shall be marked by the General Services Administration with the Government's approval. Drawings will be used in inspections of products offered under contract. All material so furnished by the manufacturer will be held in proprietary confidence.

4.5.5.1 Changes in construction or drawings. Once a product has been tested and approved for QPL, no subsequent change of any kind shall be made in its construction or in the construction drawings unless prior written authorization to make a change is obtained by the manufacturer from the Integrated Workplace Acquisition Center, Federal Acquisition Service, General Services Administration.

4.6 Test methods. Unless otherwise indicated herein, all cabinet drawers shall be loaded with the applicable weight specified below. The weight shall be evenly distributed from front to back and side to side within the drawers.

Letter size drawers - 60 pounds
Legal size drawers - 80 pounds

The cabinet with all drawers loaded shall be placed in its normal operating position on a solid floor surface. Examination shall then be made to determine the operation of all component parts, including the lock and locking mechanism, the drawer latches and pulls, and drawer suspensions. The drawer pull test in 4.6.1 shall be conducted at any time during the examination. Failure of the cabinet to comply with any specification requirement shall provide reason to reject the cabinet sample. Upon successful completion of the initial examination, the cabinet shall then be subjected to the tests in 4.6.2 through 4.6.9.

4.6.1 Drawer pull test. The drawer shall be loaded with the applicable weight specified in 4.6. The force required to move the drawer outward (not less than one inch from its fully closed position) to its fully open position, and the force to move the drawer inward from the fully open position to the point where it contacts the latch or lock mechanism shall not exceed 10 pounds.

4.6.2 Out stop test. The drawers shall be loaded as specified in 4.6. A limp cable shall be attached to the center of the pull or handle and extended horizontally to and over a pulley. The opposite end of the cable shall extend downward, and a weight equal to 20% of the drawer load shall be attached to the free end. The drawer shall be released, permitting the weight to land on a platform when the drawer is within 6 inches of full extension. The drawer movement shall continue, without application of further force, until the drawer contacts the out stops. The test shall be repeated three times. Any deformation of the stop shall be considered a failure.

4.6.3 Rack test. The cabinet with all drawers loaded as specified in 4.6 shall be raised not less than one inch to a position of being supported at two diagonally opposite corners. The area of support shall be not greater than 6 inches from each corner. Two hundred fifty pounds of weight shall be still loaded on the cabinet top at each of the two unsupported corners. The cabinet shall remain in this position for not less than 24 hours. The cabinet shall then be returned to its normal upright level position and examined as specified in 4.6. Failure of any moving part, including the drawer test in 4.6.1, or any resulting damage to the security protection afforded by the cabinet, shall be considered as failure to meet the test requirements.

4.6.4 Service test. Prior to the test the cabinet shall be loaded as specified in 4.6. The drawer selected for the test shall be connected by its drawer pull to a test machine which shall operate the drawer in and out on the drawer suspension. The machine shall have a positive means (no springs) for adjusting its stroke so that the drawer will travel its full distance (1/4 inch clearance is permitted at the end of each stroke). The machine shall in no way contribute to the support of the drawer. The machine shall drive the drawer at a rate of 20 cycles per minute, +2 cycles for 50,000 cycles. The drawer suspension shall be cleaned and lubricated with a lubricant recommended by the manufacturer at the end of 10,000 cycles and shall have no further servicing during the test. The drawer shall be examined and subjected to the pull test in 4.6.1 and the out stop test in 4.6.2 at the beginning of the test and at each increment of 10,000 cycles. The drawer suspension shall have failed the test if the drawer operating force exceeds ten pounds at any time during the test.

4.6.5 Moving test. The cabinet with all drawers loaded with typical filing material of the applicable weight specified in 4.6 and with the follower block drawn up tight against the filing material, shall be tipped backwards to a 45 degree angle. The cabinet shall remain in this tilted position for not less than three hours. At the end of this time it shall be returned to its normal upright position and examined in compliance with 4.6. There shall be no damage to the cabinet or its component or displacement of the drawer's contents as a result of the test. Failure of the test shall provide reason to reject the sample.

4.6.6 Follower block test. A drawer of the cabinet shall be loaded with 40 pounds of typical filing material which shall be held against the front of the drawer by the follower block. The location of the follower block shall be indicated by a mark placed on the bottom of the drawer. The machine specified in 4.6.3 for operating the drawer shall be connected to the drawer and set in motion and made to operate for 500 cycles. Upon completion of 500 cycles of operation, the position of the follower block shall again be indicated by a mark on the bottom of the drawer. Any rearward movement of the follower block, as indicated by the distance between the two marks, shall not exceed 1/2 inch. The follower block shall be examined for compliance with 3.3.5.1 or 3.3.5.2, as applicable.

4.6.7 Lock drawer test. The cabinet shall be secured to prevent tipping and all drawers shall be loaded as specified in 4.6. The cabinet shall be unlocked and all drawers opened. The locking mechanism design shall be examined to determine whether any drawer(s) will provide the greatest potential for failure of this test. The non-lock drawer(s) shall be positioned so as to be open 12 inches or less from the closed position. If several drawer positions offer equal potential for failure, each setup shall be tested. Testing shall be made by one of the following methods, as appropriate:

(1) Cabinets with a locking mechanism designed to permit the lock drawer to be closed, but prevent it from being secured (locked) until all other drawers are fully closed, shall have a torque not to exceed 50 foot-pounds applied to the lock drawer control handle of the closed lock drawer in an attempt to activate the locking mechanism and secure the lock drawer and leave any drawer unsecured. In the event it is possible to secure the lock drawer and leave any drawer unlocked, the cabinet shall have failed the test.

(2) Cabinets with the locking mechanism designed to hold the lock drawer open until all other drawers are fully closed shall have a force not to exceed 50 static pounds applied against the front face of the lock drawer in an attempt to override the locking mechanism and close and secure the lock drawer and leave any drawer unlocked. If this is possible, the cabinet shall have failed the test.

4.6.8 Locking mechanism service test. Prior to the test the locking mechanism shall be examined. The lock drawer shall be loaded as specified in 4.6. The locking mechanism shall be operated for 10,000 cycles. One cycle shall consist of dialing the combination, retracting the lock bolt and operating the lock drawer handle to retract the locking bolts, then returning the drawer to the fully locked condition, including spinning off the lock combination. Any damage to the locking mechanism shall be considered a failure.

4.6.9 Class 6, Size VIII carrying handle test. The cabinet shall be bolted or otherwise secured to the floor surface in its normal upright position. Cables shall be hooked through the handhold at midpoint on the grip area of both handles. A direct vertical force of 400 pounds shall be applied to the handles and their attachments. Any resulting failure of welds or any distortion or damage to the handles or their assembly, or to the cabinet shall be considered as failure to comply with this requirement.

4.6.10 Drop test. Each drawer of the cabinet shall be loaded with 60 pounds, which shall be compacted and held in place by the follower block. The cabinet shall be locked and then subjected to the tests specified in 4.6.8.1 and 4.6.8.2.

4.6.10.1 Thirty-six inch drop test. The cabinet shall be tilted backwards until overbalanced and allowed to free-fall squarely on its back to a hard level concrete surface. With the cabinet on its back, the top end shall be raised and allowed to rest on a 4 inch high ledge or support. The opposite end (base) shall then be elevated to a height of 36 inches and allowed to free-fall

to the concrete surface. The cabinet shall then be placed so that it

rests on one side. The base edge shall be placed on a 4 inch high ledge and the top edge shall be raised to a height of 36 inches and allowed to free fall to the concrete surface. The cabinet shall be turned on its opposite side and the test repeated. The cabinet shall then be returned to its upright position and examined for damage. Any damage to the cabinet which results in a lockout requiring the application of destructive force to correct, shall provide reason to consider the cabinet as having failed the test. Any damage which results in the failure of any design feature incorporated in the cabinet to provide protection against entry shall constitute failure of the test.

4.6.10.2 Thirty foot drop test. The loaded cabinet shall be raised so its base is 30 feet above the hard, level concrete surface. It shall then be allowed to free-fall onto the concrete. Any damage which results in the release of the stored material or which makes the material accessible without further force shall constitute failure of the test.

4.6.11 Surreptitious, covert and forced entry tests. There shall be sufficient time and opportunity to study the design and construction of the cabinet and to develop testing methods prior to the start of testing. There shall be no limit to the number of methods of surreptitious, covert and forced entry attempted. Not more than two men shall be used simultaneously during each attempt at entry. The man-minute working time shall cover the period during which a surreptitious, covert or forced entry test on the cabinet is in progress and shall be exclusive of time required for safety precautions and rest periods.

4.6.11.1 Tools and devices. Tools and devices used in the surreptitious entry tests are unlimited, except that the total weight of the tools used for a single test shall not exceed 150 pounds. The tools and devices used in the covert entry tests shall be limited as specified below. Power tools, electrically or battery powered shall be commercially available equipment, and shall be limited to drills not exceeding 5000 rpm. Pressure rigs may be used, with a lever arm not exceeding 30 inches. Tools may be reasonably modified, (i.e., special chucks on drills, ground or shaped chisels or pry bars, etc.). Electrical tools shall be able to operate on electricity available in normal office space. Tools and devices shall be capable of being carried in two cases or bags, each case or bag not exceeding 1.5 cubic feet in volume. The total weight of the tools used in a single test shall not exceed 150 pounds, exclusive of the weight of the case. Devices for the application of heat shall be limited to single tank propane, butane or equivalent devices which fall within the weight and dimension limits specified above. Acetylene, MAPP or equivalent shall not be used. Electric arc or any form of burn bars, oxidizer assisted products or explosives will not be used. The tools and devices used for forced entry tests shall be limited to non-powered tools only. The test tools and devices selected for a particular attempt shall be weighed prior to commencement of the test.

4.6.11.2 Timing. The time clock shall be started when the test equipment is picked up to approach the sample and shall not be stopped during the test except as specified above. Any change or repair of tools taken from the carrying case during a test shall only be done while the clock is running. The tests must be conducted in a manner that is repeatable. Any surreptitious, covert or forced entry into the cabinet under the above conditions, within the time specified for the cabinet's class, shall provide reason to consider the cabinet as having failed to meet the requirement.

4.6.12 Entry by radiological techniques. The cabinet shall successfully meet the following test to demonstrate resistance to entry by radiological techniques. The cabinet structure shall be radiographed and the resulting radiographs shall not permit determination of the lock combination to the

extent that entry is made into the cabinet in less than the time specified. Radioactive isotopes and other sources, of any type judged to be effective for the purpose of this test, will be used. Any effective radiation shielding provided in the cabinet will be included in the test. The test is intended to simulate attempted entry within the specification limit of 150 pounds of equipment, utilizing practicable and feasible procedures and equipment available to Government testing agencies performing the tests. Any entry made under the preceding conditions within 20 man-hours shall be considered a failure of the cabinet to meet the requirement of this specification.

4.6.13 Finish test.

4.6.13.1 Bend test. A 20 gage steel panel prepared as specified in 3.5.2 shall, at room temperature, be bent around a 1/4 inch rod to an angle of 180 degrees and then examined for compliance with 3.5.2.

4.6.14 6 inch drop test (S cabinet only). The SB cabinet, loaded with 20 pounds per drawer, shall be locked and then raised until the bottom of the pedestal is 6 inches above the floor surface. The cabinet shall then be allowed to free fall, base down, onto a hard level surface. The test shall not cause appreciable distortion to the pedestal nor weaken its attachment to the cabinet. Additionally, any resulting damage to the security protection afforded by the cabinet, or its operation, shall be considered as failure to meet the test requirements. Failure of the test shall provide reason to reject the sample.

4.6.15 High impact shipboard shock test (S cabinet only). In accordance with MIL-S-901 the S cabinet shall undergo the following test criteria:

Test Category- Medium Weight
Shock Grade- Grade A
Equipment Class- Class 1
Shock Test Type- Type A, Principal Unit
Equipment Mounting Location- Deck Mounted
Mounting Plane aboard Ship- Base Mounted
Mounting Orientation aboard Ship- Unrestricted
Exceptions to MIL-S-901- None

The cabinet shall be mounted to a 1 inch thick, 36 inch by 36 inch (minimum) steel plate with six Grade 5, ½-13 UNC hex head bolts and lock nuts. The bolts will be tightened to 75 ft-lbs (dry). This plate will then be mounted to the medium weight shock test machine. Each drawer shall be loaded with 20 pounds, which shall not be compacted or held in place by the follower block. The cabinet will then be locked. The cabinet may not be opened, removed from the mounting plate or the load adjusted in any way for the duration of the test.

The cabinet shall be subjected to nine impacts as defined in Table IV. The test shall not cause the container or any of its component parts to break loose from their mountings. There shall be no appreciable distortion to the cabinet or pedestal nor weakening of any of their mechanical attachments or welds. Additionally, any resulting damage to the security protection afforded by the cabinet, or its operation, shall be considered as failure to meet the test requirements. Failure of the test shall provide reason to reject the sample.

TABLE IV. Shock Blow Test.

Blow #	Group #	Equipment Test Orientation	Hammer Drop Height (ft)	Anvil Table Travel (in)
1	I	Vertical	1	3
2	II		2	3

3	III		2	1.5
4	I	Inclined 30° mounting, drawer fronts facing down the incline	1.25	3
5	II		2.25	3
6	III		2.25	1.5
7	I	Inclined 30° mounting, side of cabinet facing down the incline	1.25	3
8	II		2.25	3
9	III		2.25	1.5

4.6.16 Vibration test (S cabinet only). In accordance with MIL-STD-167-1 the S cabinet shall undergo the following test criteria:

Test Category - I, Externally Generated Environmental Vibration
Range - 4 to 33 Hz
Exceptions to MIL-STD-167-1A - None

The cabinet shall be mounted to a 1 inch thick, 36 inch by 36 inch (minimum) steel plate with six Grade 5, ½-13 UNC hex head bolts and lock nuts. The bolts will be tightened to 75 ft-lbs (dry). This plate will then be mounted to the vibration test machine. Each drawer shall be loaded with 20 pounds, which shall not be compacted or held in place by the follower block. The cabinet will then be locked. The cabinet may not be opened, removed from the mounting plate or the load adjusted in any way for the duration of the test.
The cabinet shall be subjected to the following tests with vibration frequencies as defined in Table V.

(1) Exploratory test. The cabinet shall be vibrated at frequencies from 4 to 33 Hz at a table vibratory single amplitude of 0.010 ± 0.002 inch. The change in frequency is to be made in discrete frequency intervals of 1 Hz and maintained at each frequency for a minimum of 15 seconds.

(2) Variable frequency test. The cabinet shall be vibrated at frequencies from 4 to 33 Hz at a table vibratory single amplitude as shown in Table IV. The change in frequency is to be made in discrete frequency intervals of 1 Hz and maintained at each frequency for 5 minutes.

(3) Endurance test. The cabinet shall be vibrated for a total of two hours at the resonant frequencies chosen by the test engineer, or at 33 Hz if no resonances were noted. If more than one resonance was evident, the two hour endurance test will be divided proportionately between the resonances chosen by the test engineer.

TABLE V. Vibratory Displacement of Environmental Vibration.

Frequency Range (Hz)	Table Single Amplitude Displacement (inches)
4 to 15	0.030 ± 0.006
16 to 25	0.020 ± 0.004
26 to 33	0.010 ± 0.004

The test shall not cause the container or any of its component parts to break loose from their mountings. There shall be no appreciable distortion to the cabinet or pedestal nor weakening of any of their mechanical attachments or welds. Additionally, any resulting damage to the security protection afforded by the cabinet, or its operation, shall be considered as failure to meet the test requirements. Failure of the test shall provide reason to reject the sample.

4.7 Inspection. A visual inspection shall be made of the product to determine compliance with the requirements specified in the following paragraphs:

3.2 Material
3.3.2 Dimensions and weight
3.3.3 Assembly
3.3.4 Drawers, including design, construction, face hardware, stops and latching mechanism
3.3.5 Follower block
3.3.6 Drawer suspensions
3.3.7 Drawer dimensions
3.3.8 Carrying handles and dial knob protector
3.4 Locking mechanism and lock
3.5 Pretreatment and finish
3.8 Cabinet labels
3.9 Workmanship

5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A, B or C, as specified (see 6.3).

5.1.1 Levels A and B. Each filing cabinet shall have the follower blocks (or other internal parts that can come loose in handling and transit) secured in place with pressure sensitive tape, packing clips or other suitable means. A printed spare parts list (see 3.12) shall be placed inside the top drawer. Cellulose wadding strips or non-abrasive cushioning pads, not less than 1/8 inch thick, shall be used on the top and side edges of each drawer front to prevent metal-to-metal contact when closed. The entire cabinet, except for the bottom, shall be covered with a bag made of polyethylene film not less than 3 mils thick.

5.1.2 Level C. Each cabinet shall be prepared for packing to insure adequate protection against abrasion and damage during shipment.

5.2 Packing. Packing shall be level A, B or C as specified (see 6.3).

5.2.1 Level A. Each cabinet packaged as specified in 5.1.1, shall be packed in a tight-fitting box conforming to PPP-B-601, overseas type, styles C or I or to PPP-B-621, Class 2 with the exception that the weight limit of 1000 pounds is increased to 1200 pounds. The interior packing shall be as specified in 5.2.2. The contents of each box shall be waterproofed by means of case liners constructed and sealed in accordance with MIL-L-10547. The box shall be closed and strapped or reinforced in accordance with the appendix to the box specification.

5.2.2 Level B. Each container packaged as specified in 5.1.1 shall be packed as specified in 5.2.1, except that the containers shall be domestic class and type, and the case liners shall not be required. "L" shaped pads, molded or folded, extending at least 80% of the cabinet height, shall be cursed in all four corners of the pack. The corner pads shall provide a minimum inside face of 2-1/2 inches and a clearance not less than 5/8 inch

between the cabinet (including face hardware) and the inside walls of the box. Additional form fitting top corner pads or a corrugated fiberboard spring pad (full inside length and width of the box) shall be used on top of the cabinet to provide a minimum clearance of 5/8 inch between the cabinet top and the box. The box shall be closed and strapped in accordance with the appendix to the applicable box specification.

5.2.3 Level C. Each cabinet, packaged as specified in 5.1.2, shall be individually packed in a box that will assure acceptance and safe delivery in compliance with National Motor Freight Classification and the Uniform Freight Classification.

5.3 Marking. Marking shall be in accordance with 5.3.1 or 5.3.2, as specified (see 6.2) and shall include all precautionary marking required by the National Motor Freight Classification and the Uniform Freight Classification for furniture items as described in this specification.

5.3.1 Civil agencies. Each shipping container shall be marked in accordance with FED-STD-123.

5.3.2 Military activities. Each shipping container shall be marked in accordance with MIL-STD-129.

6 NOTES

6.1 Intended use. Cabinets furnished under this specification are intended for the filing and storing of classified material as prescribed by the using activity. Weapons containers are intended for weapons storage and are not authorized for storage of classified material. Cabinets designated as special size are for use in mobile or transportable tactical communication assemblages where, through installation, they will become an integral part of the assemblage. They are not recommended as items of office furniture. Class 6-S containers are intended primarily for use on DoD ships where, through installation, they will become an integral part of the assemblage. They are not recommended as items of office furniture.

6.2 Installation (S cabinet only). The S cabinet is designed to be mounted in the field by the end user. Mounting may be accomplished by either bolting or welding the cabinet’s pedestal directly to the deck or a preinstalled plinth which is part of the ship. Drilling, hot work and painting performed only at the specified locations (see below) shall not affect the cabinet’s security integrity or its GSA approval. Any other modifications to the cabinet are prohibited.

6.2.1 Bolting (S cabinet only). The cabinet requires a minimum of six Grade 5, ½-13 UNC hex head bolts and lock nuts be used. The mounting flange located at the bottom of the cabinet’s pedestal may be drilled to accommodate these bolts. The bolt pattern should be evenly distributed around the perimeter of the pedestal. In order to clear integral members below the surface of the deck, the bolt pattern may be adjusted. The cabinet may be moved and reinstalled as required. Mounting requirements in excess of those described shall be the responsibility of the end user.

6.2.2 Welding (S cabinet only). The cabinet requires that a minimum 20% of the pedestal’s footprint perimeter be welded to the deck or plinth. Welds shall not extend higher than ½ inch from the bottom of the cabinet’s pedestal. Welds shall be evenly distributed around the perimeter of the pedestal. The cabinet may be moved and reinstalled as required by grinding off the welds. In the process of grinding the pedestal shall not be damaged. Welding requirements in excess of those described shall be the responsibility of the end user.

6.2.3 Painting (S cabinet only). The cabinet’s pedestal may be repainted after mounting to prevent corrosion. The pedestal shall not be repainted higher than 3 inches from its bottom, either outside or inside. The type and color of the paint used shall match that of the deck or plinth that the cabinet is mounted on. No other part of the cabinet may be repainted except in accordance with FED-STD-809.

6.3 Ordering data. Purchasers should exercise any desired options offered herein, and procurement documents should specify the following:

(a) Title, symbol and date of this specification.
(b) Class and size required (see 1.2.1).

(c) Whether ML, DL or DM design required (see 1.2.2).
(d) If DM design, number of dual lock drawers (see 1.2.2).
(e) Color of finish (see 3.2.5).
(f) Hand or key change type of combination lock required (see 3.4.2).
(g) Whether caster base platform required (see 3.3.9).
(h) Levels of packaging, packing and marking required (see 5).

6.4 Qualification. With respect to the products requiring qualification, awards will be made only for such products as have, prior to the time set in the solicitation for bids or request for proposal, been tested and approved for inclusion on the applicable Federal Qualified Products List, whether or not such products have actually been so listed by that date. The attention of suppliers is called to this requirement, and the manufacturers are urged to arrange to have products that they propose to offer the Federal Government tested for qualification so that they may be eligible to be awarded contracts or orders for the products covered by this specification. The activity responsible for the Qualified Products List is the Furniture Commodity Center, Engineering Division, General Services Administration, Washington, DC 20406, and information pertaining to qualification may be obtained from that activity.

6.5 Definitions of terms used in this specification.

6.5.1 Entry. For the purpose of this specification, entry means: (1) the opening of one or more drawers of the cabinet, or (2) provision of a gap, crevice or hole of any dimension in the cabinet from which material can be extracted.

6.5.2 Surreptitious entry. For the purpose of this specification, surreptitious entry means a method of entry, such as lock manipulation or radiological attack on the combination lock, which would not be detectable during normal use or during inspection by a qualified person.

6.5.3 Covert entry. For the purpose of this specification, covert entry is defined as a method of entry which causes physical damage to the container or lock such that the damage can be repaired to the point where it would not be detectable by a user during normal use. However, the damage would be detectable during inspection by a qualified person. If replacement parts, including replacement lock parts, or paint, are necessary to conceal the damage caused by the entry attempt so it cannot be detected during normal use, the entry method shall be considered covert.

6.5.4 Forced entry. For the purpose of this specification, forced entry means a method of entry which would leave evidence of the act and which would be readily discernible in the normal use of the cabinet. Forced entry is considered to be an attack in which the attacker has no concern over leaving evidence that the container has been opened.

6.5.5 Normal use. For the purpose of this specification, normal use means the opening of the combination lock, releasing the locking mechanism, opening the cabinet drawer to the extent necessary for the reception or withdrawal of material, and closing and relocking the cabinet.

6.5.6 Lock manipulation. For the purpose of this specification, lock manipulation is defined as the opening of the combination lock without alteration of the physical structure, or disarranging of parts. Ordinarily, manipulation would be accomplished by movement of the lock dial.

6.6 Samples. All samples required for test purposes shall be furnished at no expense to the Government and the manufacturer shall pay all transportation to and from the point where the tests are performed. All tested samples shall become property of the Government but may be released to the manufacturer at the option of the Government. Upon request, the manufacturer

shall furnish to the Government testing facility, a cabinet equal in respect to that of the qualified sample for use in inspection and test during the term of qualification. The cabinet shall be furnished at no expense to the Government and will be returned to the manufacturer upon removal of his product from the qualified products list.

6.7 Special techniques. Information relating to the requirements of 3.4.4 in respect to special techniques will be disclosed to qualified suppliers and personnel of the Federal agencies on a need to know basis.

MILITARY INTERESTS:

PREPARING ACTIVITY
GSA-FAS

REVIEW ACTIVITIES:
Army
Navy
Air Force

CIVIL AGENCY COORDINATING ACTIVITIES:
State Department
CIA
NSA
Department of Justice
Department of Transportation
Department of Commerce
Department of Treasury

Figure I
Design DL

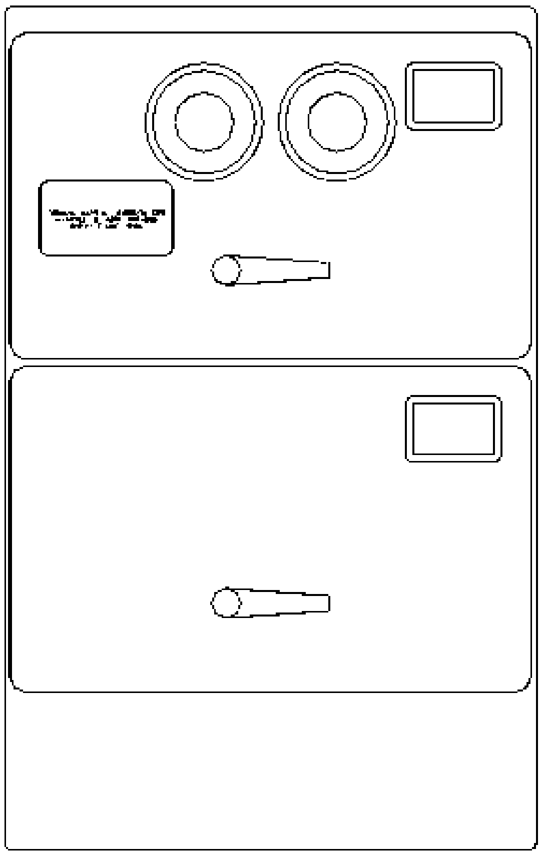


Figure II
Design DM

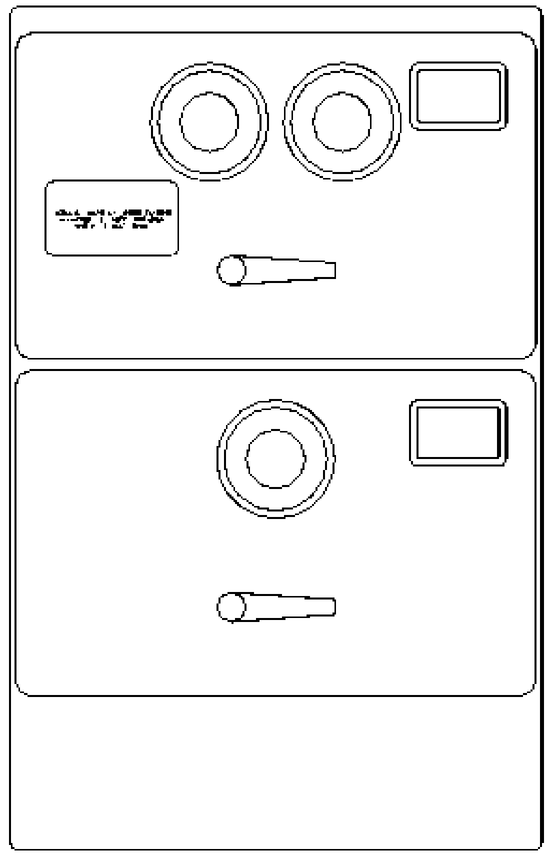


Figure III
Design ML

